



ECCS position on Circular Economy and Module D

Addressing the need for relevant information to empower consumers and public buyers

Among the focus areas of the **CE Circular Economy Action Plan**¹ is to propose “a sustainable product policy legislative initiative” where the core is “the widening of the Ecodesign Directive beyond energy-related products so as to make the Ecodesign framework to the broadest possible range of products and make it deliver on circularity.”

The commission points out three main ways to meet the goals:

- A. Designing sustainable products
- B. Empowering consumers and public buyers
- C. Circularity in production processes

Empowering consumers and public buyers implies the **development of key indicators** that lead to rational decisions promoting a resource efficient society. **Indicators that are too simplified** and that do not take all relevant factors into account may lead to misleading information and **contra productive decisions**.

“**Construction and buildings**” is selected as a key value chain and announces a new comprehensive **Strategy for a Sustainable Built Environment**. “Construction and buildings” must undergo a deep transformation to achieve **carbon neutrality** and implement **circular economy by 2050**.

There are currently profitable and consolidated examples of circular economy in the construction industry that generate economic activity and positive environmental impacts. These **existing circular economies** are called to play a key role as **enablers** for the transition of other industries from linear to circular economy.

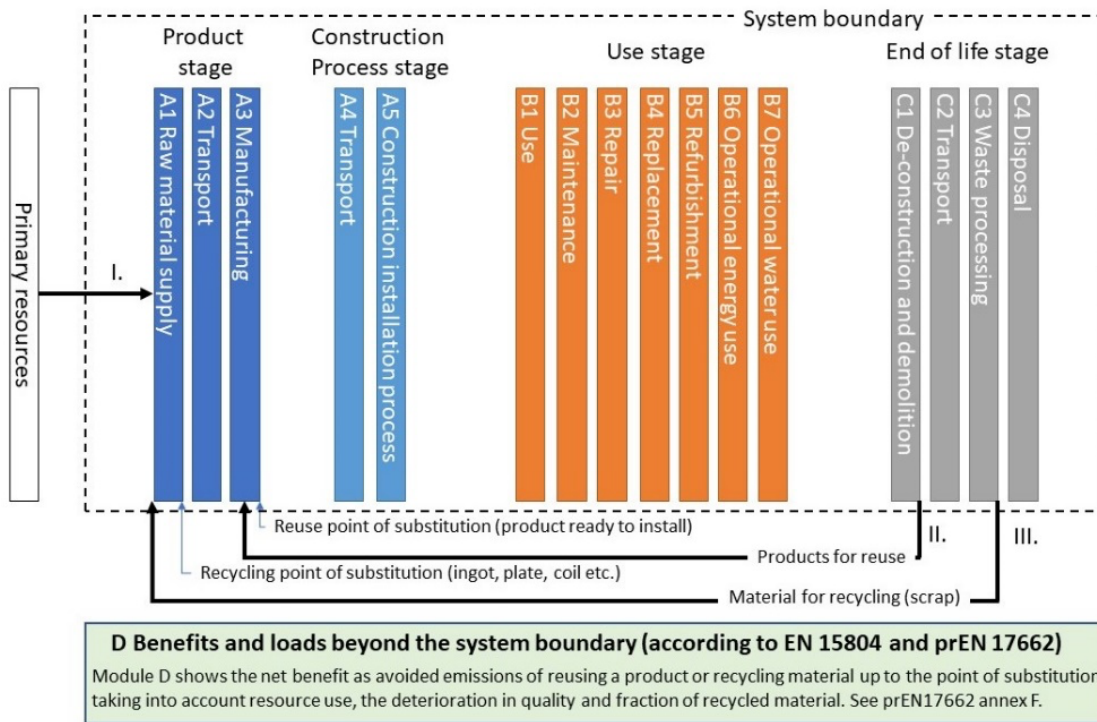
As part of these deep transformation, it will be necessary to **extend the scope of current LCA methodologies** (based on products linear life cycle) to include the “benefits and loads beyond the system boundary” declared in **Module D**. Thus, accounting the impacts of recycling, re-use and the circular economy implementation and **promoting the adoption of circular economy**.

Module D takes into account the **net benefits of reuse and recycling** expressed as mitigated resource use and emissions. Module D must be assessed and reported according to EN 15804.

1. Module D takes into account the **quality loss or quality improvement of the recycling process** and is therefore transparent to downcycling and upcycling.
2. Module D does not have the flaws of the recycled content concept since it focusses on the reusability and recyclability properties of the building product and is **not dependent on market availability of secondary material**.

The function of module D is shown as the green box in this simplified figure. Primary material (I) and secondary material (III) are used in module A1. After the end of life processes the products can be reused or recycled. The benefit of reuse and recycling is calculated considering the resource used and emissions in the processes to reach the point of substitution and compare these with data for the first life cycle.

¹ A new Circular Economy Action Plan For a cleaner and more competitive Europe, Brussels, 11.3.2020 COM(2020) 98.



Ref. Gyllenram et al, 2021, Module D and the Circular Economy, Paper in progress

The **CEN TC 350 “Sustainability in Construction”** is developing a family of standards that will integrate the **EN 15804** results as **scores, metrics and indicators** e.g.: **pr-EN 17672:2021 Sustainability of construction works** and **pr-EN 15978 — Environmental product declarations — Horizontal rules for business-to-consumer communication and Sustainability of construction works - Methodology for the assessment of performance of buildings**. In parallel, different regulations at national level will start to set environmental footprint and circularity requirements in the short/medium term.

A **linear life cycle approach** to impact assessment, **excluding or reporting separately** the “benefits and loads beyond the system boundary” declared in **Module D**, will have a **negative impact on the adoption of circular economy practices** promoting the use of technologies which recycling and re-use produces no or low positive impact and which circularity is uncertain.

It is ECCS position that:

- **Module D is a necessary instrument to declare the circularity properties of building materials** clarifying the impact on emissions and resource use from reuse and recycling.
- **EN 15804 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products** provides an **accurate methodology to quantify the sustainability** of construction works in a **circular economy** approach including: **recycled material use** (Module A) and **reusability and recyclability** (Module D) avoiding double accounting of benefits.
- **The CEN TC 350 standards (pr-EN 15978, pr-EN 17672 and others)** as well as any regulation, label or standard related to Sustainability in Construction including **scores, metrics and indicators must include and integrate A1-C4 and Module D “benefits and loads beyond the system boundary” in single scores**, avoiding the separation of impacts in A1-C4 and Module D in these scores, metrics, and indicators.

Brussels, 17 January 2022